Message

From: Avise, Jeremy@ARB [jeremy.avise@arb.ca.gov]
Sent: 9/19/2019 8:40:20 PM
To: Bohning, Scott [Bohning.Scott@epa.gov]
CC: Chen, Jianjun@ARB [James.Chen@arb.ca.gov]
Subject: FW: SJV species responses
Attachments: Summary_PM2.5_Species_Change_PrecursorSensitivity_2013.docx; Summary_PM2.5_Species_Change_PrecursorSensitivity_2024.docx; Summary_PM2.5_Species_Change_PrecursorSensitivity_2020.docx

Hi Scott,

Attached is the additional info you were asking about. Please note James' qualifier below, that some of the changes seen for individual species are due to a change in the 98th percentile days for a given sensitivity run and are not a true change/sensitivity in the modeling.

Let us know if you have any follow up questions.

Thanks,
Jeremy

From: Chen, Jianjun@ARB <James.Chen@arb.ca.gov>
Sent: Tuesday, September 17, 2019 8:41 AM
To: Avise, Jeremy@ARB <jeremy.avise@arb.ca.gov>
Subject: RE: SJV species responses

Hi Jeremy,

Please look at the attached 3 files for the detailed PM species information for precursor runs. I have separated them into 3 files, which correspond to 2013, 2020, and 2024 precursor runs. In each file, the first 8 tables are for annual standard and the following 8 tables are for 24-hour standard. One thing for the 24-hour standard is that: if EPA's focus is on model response, **one has to look at the monitors that have the same 98th percentile days between the baseline and the precursor run**. I have included a column in the table specifying whether the site has the same 98th percentile days. The reason is that, for example, NH3 precursor run usually does not impact EC concentration in the model. However, if the 98th percentile days are different, you will see change of EC concentrations. The change is not due to modeled change of EC to NH3 reduction, rather it is due to a shift in 98th percentile days between the baseline and the precursor run. I think that this is very important.

Let me know if there is any question or you want reformat the tables. Thanks.

James

From: Bohning, Scott <Bohning.Scott@epa.gov>
Sent: Tuesday, September 10, 2019 3:59 PM
To: Avise, Jeremy@ARB <jeremy.avise@arb.ca.gov>
Subject: SJV species responses

Jeremy –

I hope you are doing well.

Thanks for the additional information you provided back in June about disbenefit of SOx reductions.

One thing I forgot to ask you for on San Joquin Valley $PM_{2.5}$ precursor demonstration was something OAQPS expressed interest in, early in the year. To help understand model responses to reductions, especially for SOx and VOC but I think also for ammonia, it would be helpful to have individual species responses, rather than just total $PM_{2.5}$.

E.g. at least for the 30% reduction cases for 2013 at selected sites, but for 70% and the other years if not too difficult. This would count as "additional information" for the precursor demonstration, and give additional confidence that the model is being reasonable for this purpose. Do you think this is something you could provide over the next month?

(Note that this is not directly related to the 9/24 call we have coming up, which I think is to be more focussed on reasonableness of relying on the 30% reduction responses vs. the 70%.)

- Scott B.
P.S. I may not be able to get into my EPA email tomorrow 9/11.

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"Scott Bohning" <bohning.scott@epa.gov>
U.S. EPA Region 9, AIR-4-2
415/947-4127 fax-3579